

# UNITED STATES PATENT AND TRADEMARK OFFICE



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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/848,954	05/03/2001	Sergey Lyusin	0008026-0006	6924
7590 05/03/2004			EXAMINER	
KENNETH M BERNER			ISSING, GREGORY C	
LOWE HAUPTMAN GILMAN & BERNER				
1700 DIAGONAL RD			ART UNIT	PAPER NUMBER
SUITE 300			3662	
ALEXANDRIA, VA 22314			DATE MAILED: 05/03/2004	

Please find below and/or attached an Office communication concerning this application or proceeding.

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	Application No.	Applicant(s)
	09/848,954	LYUSIN, SERGEY
Office Action Summary	Examin r	Art Unit
	Gregory C. Issing	3662
Th MAILING DATE of this communica Period for Reply	tion appears on the cover sheet wit	th the correspondenc address
A SHORTENED STATUTORY PERIOD FOR THE MAILING DATE OF THIS COMMUNICA  - Extensions of time may be available under the provisions of 3 after SIX (6) MONTHS from the mailing date of this communic  - If the period for reply specified above is less than thirty (30) do  - If NO period for reply is specified above, the maximum statuto  - Failure to reply within the set or extended period for reply will,  Any reply received by the Office later than three months after earned patent term adjustment. See 37 CFR 1.704(b).	TION. 7 CFR 1.136(a). In no event, however, may a reseation. ays, a reply within the statutory minimum of thirty ry period will apply and will expire SIX (6) MONT by statute, cause the application to become ABA	eply be timely filed  y (30) days will be considered timely.  THS from the mailing date of this communication.  ANDONED (35 U.S.C. § 133).
Status		
1) Responsive to communication(s) filed of	on <u>22 March 2004</u> .	
2a)⊠ This action is <b>FINAL</b> . 2b)	☐ This action is non-final.	
3) Since this application is in condition for closed in accordance with the practice		-
Disposition of Claims		
4) ☐ Claim(s) 1-30 is/are pending in the app 4a) Of the above claim(s) is/are v 5) ☐ Claim(s) is/are allowed. 6) ☐ Claim(s) 1-30 is/are rejected. 7) ☐ Claim(s) is/are objected to. 8) ☐ Claim(s) are subject to restriction	withdrawn from consideration.	
Application Papers		
9)☐ The specification is objected to by the E	xaminer.	
10) The drawing(s) filed on is/are: a		-
Applicant may not request that any objectio	•	
Replacement drawing sheet(s) including the 11) The oath or declaration is objected to by	•	, , ,
Priority under 35 U.S.C. § 119		
12) Acknowledgment is made of a claim for a) All b) Some * c) None of:  1. Certified copies of the priority doe 2. Certified copies of the priority doe 3. Copies of the certified copies of the application from the International * See the attached detailed Office action for	cuments have been received. cuments have been received in Ap he priority documents have been Bureau (PCT Rule 17.2(a)).	pplication No received in this National Stage
Attachment(s)		
1) Notice of References Cited (PTO-892)	4) Interview St	ummary (PTO-413)
Notice of Draftsperson's Patent Drawing Review (PTO-3) Information Disclosure Statement(s) (PTO-1449 or PTO Paper No(s)/Mail Date		)/Mail Date formal Patent Application (PTO-152) ·

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1. Note: the last several communications from the applicants' representative has included a different inventor than was originally filed. After the revocation of power of attorney, filed 4/9/03, all papers received by the PTO have indicated a different inventor than was originally indicated. Originally, the applicant was "Sergey Lyusin" whereas now the applicant is listed as "Todd V. Townsend." Applicant is required to correct the inconsistency in response to this Office Action.

- 2. The following is a quotation of the first paragraph of 35 U.S.C. 112:
  - The specification shall contain a written description of the invention, and of the manner and process of making and using it, in such full, clear, concise, and exact terms as to enable any person skilled in the art to which it pertains, or with which it is most nearly connected, to make and use the same and shall set forth the best mode contemplated by the inventor of carrying out his invention.
- 3. Claims 1-30 are rejected under 35 U.S.C. 112, first paragraph, as failing to comply with the written description requirement. The claims contain subject matter which was not described in the specification in such a way as to reasonably convey to one skilled in the relevant art that the inventor(s), at the time the application was filed, had possession of the claimed invention. The specification does not disclose using only the assistance signal when the satellite signals have inadequate SNR. Moreover, it would not be clear how "using only the assistance signal" would provide a positioning system since the scope of "using" is not clear and since the assistance signal is merely aiding information including as exemplified in the specification Doppler frequencies, Ephemeris data, Almanac data, navigation message bits, and correction information. The specification does not sufficiently describe how positioning is determined using only the assistance data. Lastly, the scope of "inadequate" is not defined in the specification. The applicants argue that the specification complies with the written description requirement since the transition word "comprising" leaves the claims open-ended and thus uses

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an assistance signal along with other signals. This is not convincing. Firstly, the "comprising" is descriptive of the system components, i.e. the satellites, broadcast station and receiver. Secondly, the applicants specifically amended the claim language to incorporate the language "use only said assistance signal when said satellite signals have inadequate SNR" in an attempt to overcome the prior art and is descriptive of not using anything except the assistance signal, see paper filed 9/16/03, page 4, for example. Thus, the rejection is maintained and the applicants' argument is not convincing.

- 4. The text of those sections of Title 35, U.S. Code not included in this action can be found in a prior Office action.
- 5. Claims 1-6, 9, 11-16, 19, 21-26, and 29 are rejected under 35 U.S.C. 102(b) as being anticipated by Taylor et al.
- Taylor et al disclose the claimed system and method including a plurality of satellites 16 configured to transmit signals, a broadcast station antenna 29 configured to transmit an assistance signal and a plurality of receiver terminals 14 configured to receive the satellite signals and the assistance signals. The assistance signals may include, as shown in Figure 2, Doppler data, satellites-in-view data and satellites' position data. In view of the similarity in the claimed system and the prior art, the computer program product, as best understood, which could be used to perform the steps of the method is inherent.
- 7. Applicant argues that Taylor et al fail to suggest using only the assistance data when the satellite signals have an inadequate SNR. As set forth above, such feature is not sufficiently disclosed in the specification, is considered new matter and is not considered as being a part of the claim (as it is required to be cancelled). Therefore, the claims merely set forth a positioning

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system with transmitting satellites, a broadcast station transmitting assistance data and a receiver. This is shown by Taylor et al, as well as any DGPS receiver system, wherein there are GPS satellites transmitting positioning signals, a base station transmitting assistance data and the mobile receiver receiving and using the satellite signals and the base station signals. Additionally, note that the remarks in the response filed 9/8/03 attempt to get around the written description of the invention rejection by stating "the positioning system uses an assistance signal along with other signals" since "comprising" is open-ended. Thus, the applicants' remarks are contradictory.

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- 8. Claims 1-7, 9-17, 19-27 and 29-30 are rejected under 35 U.S.C. 102(e) as being anticipated by Krasner.
- 9. Krasner discloses the claimed system and method for use in a position determining system including a mobile terminal, as shown by Figure 6A, that receives signals from GPS satellites via antenna 613 and signals from a base station via communication antenna 601 in order determine position with reduced power consumption. The signals from the base station, which is exemplified in Figures 5A and 5B, include Doppler data, identities of satellites in view and/or satellite almanac data. Such data may be derived at the base station or may be obtained from a server site on the Internet. The receiver is suggested to be a 2-way pager or cellular telephone. In view of the similarity in the claimed system and the prior art, the computer program product, as best understood, which could be used to perform the steps of the method is inherent in view of the digital processing of Krasner.
- 10. Applicant argues that Krasner fails to suggest using only the assistance data when the satellite signals have an inadequate SNR. As set forth above, such feature is not sufficiently

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disclosed in the specification, is considered new matter and is not considered as being a part of the claim (as it is required to be cancelled). Therefore, the claims merely set forth a positioning system with transmitting satellites, a broadcast station transmitting assistance data and a receiver. This is shown by Krasner, as well as any DGPS receiver system, wherein there are GPS satellites transmitting positioning signals, a base station transmitting assistance data and the mobile receiver receiving and using the satellite signals and the base station signals. Additionally, note that the remarks in the response filed 9/8/03 attempt to get around the written description of the invention rejection by stating "the positioning system uses an assistance signal along with other signals" since "comprising" is open-ended. Thus, the applicants' remarks are contradictory.

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- 11. Claims 7, 8, 17, 18, 27 and 28 are rejected under 35 U.S.C. 103(a) as being unpatentable over either one of Krasner or Taylor et al in view of Richton et al.
- 12. Each of Krasner and Taylor et al teach the subject matter substantially as claimed including the provision of satellite signals and assistance signals to a mobile receiver for the purpose of determining position. While Krasner suggests the incorporation within a cellular telephone, Taylor et al merely suggest incorporation within a user terminal without being specific. However, each prior art terminal does incorporate a satellite receiver, a communication receiver and a computing processor. Richton et al additionally teach an auxiliary system for providing assistance data to wireless terminals operable for determining position from navigation satellites. Furthermore, Richton et al suggest uses inclusive of cellular telephones and portable data terminals. Thus, it would have been obvious to one having ordinary skill in the art at the time the invention was made to modify either one of Krasner or Taylor et al by incorporating the

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position determining system utilizing assistance data in any conventional portable device including cellular telephones or personal data terminals in view of the teachings of Richton et al.

- 13. Applicants do not separately argue this rejection; these claims therefore stand or fall with the claims from which they depend.
- 14. The prior art previously made of record and not relied upon is considered pertinent to applicant's disclosure. Watters et al are cited as showing an integrated GPS/cellular receiver wherein when GPS signals are inadequately received, the cellular base station signals are utilized to determine position. Switch 995 shows using only one of the signals at a time. The cellular station signals would meet the scope of assistance signal as claimed.
- 15. The drawings changes previously indicated are required to be submitted as replacement sheets.

#### INFORMATION ON HOW TO EFFECT DRAWING CHANGES

## **Replacement Drawing Sheets**

Drawing changes must be made by presenting replacement figures which incorporate the desired changes and which comply with 37 CFR 1.84. An explanation of the changes made must be presented either in the drawing amendments, or remarks, section of the amendment. Any replacement drawing sheet must be identified in the top margin as "Replacement Sheet" and include all of the figures appearing on the immediate prior version of the sheet, even though only one figure may be amended. The figure or figure number of the amended drawing(s) must not be labeled as "amended." If the changes to the drawing figure(s) are not accepted by the examiner, applicant will be notified of any required corrective action in the next Office action. No further drawing submission will be required, unless applicant is notified.

Identifying indicia, if provided, should include the title of the invention, inventor's name, and application number, or docket number (if any) if an application number has not been assigned to the application. If this information is provided, it must be placed on the front of each sheet and centered within the top margin.

#### **Annotated Drawing Sheets**

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A marked-up copy of any amended drawing figure, including annotations indicating the changes made, may be submitted or required by the examiner. The annotated drawing sheets must be clearly labeled as "Annotated Marked-up Drawings" and accompany the replacement sheets.

## **Timing of Corrections**

Applicant is required to submit acceptable corrected drawings within the time period set in the Office action. See 37 CFR 1.85(a). Failure to take corrective action within the set period will result in ABANDONMENT of the application.

If corrected drawings are required in a Notice of Allowability (PTOL-37), the new drawings MUST be filed within the THREE MONTH shortened statutory period set for reply in the "Notice of Allowability." Extensions of time may NOT be obtained under the provisions of 37 CFR 1.136 for filing the corrected drawings after the mailing of a Notice of Allowability.

16. All claims are drawn to the same invention claimed in the application prior to the entry of the submission under 37 CFR 1.114 and could have been finally rejected on the grounds and art of record in the next Office action if they had been entered in the application prior to entry under 37 CFR 1.114. Accordingly, **THIS ACTION IS MADE FINAL** even though it is a first action after the filing of a request for continued examination and the submission under 37 CFR 1.114. See MPEP § 706.07(b). Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire THREE MONTHS from the mailing date of this action. In the event a first reply is filed within TWO MONTHS of the mailing date of this final action and the advisory action is not mailed until after the end of the THREE-MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however,

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will the statutory period for reply expire later than SIX MONTHS from the mailing date of this final action.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Gregory C. Issing whose telephone number is (703)-306-4156. The examiner can normally be reached on Mon-Thurs 6:30-5:00.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Thomas Tarcza can be reached on (703)-306-4171. The fax phone number for the organization where this application or proceeding is assigned is (703)-872-9326.

Any inquiry of a general nature or relating to the status of this application or proceeding should be directed to the receptionist whose telephone number is (703) 308-1113.

Gregory C. Issing

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Primary Examiner
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gci

4-28-04